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DOCKET NO.: 301921.01/MSFT-1740

PATENT

Application No.: 10/600,066

Office Action Dated: February 28, 2006

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for debugging an object model comprising:
exposing a set of breakpoints through a debugging interface of an execution environment, wherein a breakpoint of the set of breakpoints is associated with an object comprising a pluggable component created by the execution environment wherein the pluggable component communicates a description of the breakpoint to the execution environment;
checking a status of the breakpoint at predetermined intervals; and
responding to a request for suspend and resume.
2. (Original) The method as recited in claim 1, further comprising communicating between a package deployment component and a pluggable component.
3. (Original) The method as recited in claim 1, further comprising receiving input for processing by the debugging interface, the input indicative of instructions to execute or deploy a package.
4. (Original) The method as recited in claim 1, further comprising setting the breakpoint in at least one task.
5. (Original) The method as recited in claim 4, further comprising encountering the set breakpoint by the task during task execution.
6. (Original) The method as recited in claim 5, further comprising communicating the breakpoint to the debugging interface.
7. (Previously Presented) The method as recited in claim 6, further comprising analyzing by the debugging interface states of the task prior to encountering the set breakpoint.

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8. (Original) The method as recited in claim 7, further comprising resuming the task by the debugging interface.
9. (Currently Amended) A computer readable medium having instructions to instruct a computer to:
- expose a set of breakpoints through a debugging interface of an execution environment, wherein a breakpoint of the set of breakpoints is associated with an object comprising a pluggable component created by the execution environment wherein the pluggable component communicates a description of the breakpoint to the execution environment;
 - check a status of the set of breakpoints at predetermined intervals; and
 - respond to a request for suspend and resume.
10. (Currently Amended) A method for debugging an object model, comprising:
- providing an interface manager that communicates with one or more components of the object model to provide a description of a breakpoint of a set of breakpoints, the breakpoint associated with an object comprising a pluggable component created by an execution environment;
 - determining-a the location of the breakpoints;
 - executing the a runtime to encounter the breakpoints.
11. (Original) The method as recited in claim 10, further comprising executing a package.
12. (Currently Amended) The method as recited ine claim 11, further comprising executing at least one task resulting from the package execution.
13. (Original) The method as recited in claim 10, wherein the determining step comprises setting the breakpoint by the interface manager.

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14. (Original) The method as recited in claim 10, further comprising suspending an object model component containing a breakpoint upon encountering the breakpoint.
15. (Original) The method as recited in claim 14, further comprising analyzing the object model components while suspended to determine if a runtime problem exists.
16. (Original) The method as recited in claim 14, further comprising resuming a suspended object model component.
17. (Currently Amended) A computer readable medium having computer readable instructions to instruct a computer to
- provide an interface manager that communicates with one or more components of an object model;
 - determine a location of a breakpoint, wherein the breakpoint is associated with an object comprising a pluggable component created by an execution environment wherein the pluggable component communicates a description of the breakpoint to the execution environment;
 - execute a runtime to encounter the breakpoint.
18. (Currently Amended) A system to debug breakpoints in pluggable components comprising:
- a debugging interface, the debugging interface capable of communicating with the pluggable components during run time to observe component behavior and to control components, wherein a pluggable component comprises an object created by the execution environment, the pluggable component associated with a breakpoint, wherein the pluggable component communicates a description of the breakpoint to the execution environment; and
 - breakpoints, the breakpoints being set in the pluggable components such that during run-time when a break point is encountered, the debugging interface is capable of suspending and/or resuming the operations of the pluggable components to observe pluggable component operations.

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19. (Original) The system as recited in claim 18, wherein the debugging interface sets the breakpoints in the pluggable components.

20. (Previously Presented) The system as recited in claim 19, wherein the debugging interface displays states of the pluggable components during run-time and during suspension.